



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: V2527E-A5
 UNIQUE ID NUMBER: 8IA010
 COMBUSTOR:
 ENGINE TYPE: MTF

BYPASS RATIO: 4.8
 PRESSURE RATIO (π_{00}): 27.2
 RATED THRUST (F_{00}) (kN): 111.2

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	0.4	30.6	56.2	11.6
AS % OF ORIGINAL LIMIT	2.3	25.9	59.6	50.4
AS % OF CAEP/2 LIMIT (NO _x)			74.4	
AS % OF CAEP/4 LIMIT (NO _x)			89.9	
AS % OF CAEP/6 LIMIT (NO _x)			102.1	
AS % OF CAEP/8 LIMIT (NO _x)			121.7	

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES
 - DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	1.053	0.04	0.53	26.50	5.2
CLIMB OUT	85	2.2	0.880	0.04	0.62	22.30	7.2
APPROACH	30	4.0	0.319	0.06	2.44	8.90	4.2
IDLE	7	26.0	0.128	0.11	12.43	4.70	2.6
LTO TOTAL FUEL (kg) or EMISSIONS (g)			437	32	2764	5382	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				0.3	24.9	48.5	9.0
SIGMA (D _p /F ₀₀ in g/kN, or SN)							
RANGE (D _p /F ₀₀ in g/kN, or SN)							

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 4.5 (% CORE FLOW) AT 0.07 POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	101-101.8
TEMPERATURE (K)	288-296
ABS HUMIDITY (kg/kg)	0.0086-0.0114

FUEL

SPEC	Jet A
H/C	1.9
AROM (%)	

MANUFACTURER: International Aero Engines
 TEST ORGANIZATION: Pratt & Whitney
 TEST LOCATION: East Hartford, CT
 TEST DATES: 12/08/1992-13/08/1992

REMARKS

Compliance with Fuel Venting requirements: x ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)